UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,084	04/07/2006	Billaud Philippe Jean	4590-511	8658
33308 LOWE HAUP			EXAMINER	
LOWE HAUPTMAN & BERNER, LLP 1700 DIAGONAL ROAD, SUITE 300 ALEXANDRIA, VA 22314		GREGORY, BERNARR E		
ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
			3662	
			MAIL DATE	DELIVERY MODE
			01/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
•		
Office Action Summany	10/575,084	BILLAUD ET AL.
Office Action Summary	Examiner	Art Unit
	Bernarr E. Gregory	3662
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	e correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	PATE OF THIS COMMUNICATION  136(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDOI	om the mailing date of this communication. NED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on		
	action is non-final.	
3) Since this application is in condition for allowa		prosecution as to the merits is
closed in accordance with the practice under <i>l</i>	· · · · · · · · · · · · · · · · · · ·	
Disposition of Claims		
4)⊠ Claim(s) <u>9-16</u> is/are pending in the application		
4a) Of the above claim(s) is/are withdra		
5) Claim(s) is/are allowed.	without consideration.	
6)⊠ Claim(s) is/are allowed.		
7) Claim(s) <u>9-70</u> is/are rejected. 7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/o	or election requirement	•
o) Claim(s) are subject to restriction and/o	or election requirement.	
Application Papers		
9) The specification is objected to by the Examine	er.	•
10)⊠ The drawing(s) filed on <u>07 April 2006</u> is/are: a)	) accepted or b) ⊠ objected to	o by the Examiner.
Applicant may not request that any objection to the	drawing(s) be held in abeyance. S	see 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is o	objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Ex	xaminer. Note the attached Office	ce Action or form PTO-152,
Priority under 35 U.S.C. § 119		•
12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of:	priority under 35 U.S.C. § 119(	a)-(d) or (f).
1. Certified copies of the priority document	ts have been received.	
2. Certified copies of the priority document	s have been received in Applica	ation No
3. Copies of the certified copies of the prio	rity documents have been recei	ved in this National Stage
application from the International Bureau	u (PCT Rule 17.2(a)).	
* See the attached detailed Office action for a list	of the certified copies not receive	ved.
Attachment(s)		
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summa Paper No(s)/Mail	
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal	
Paper No(s)/Mail Date	6) Other:	

Art Unit: 3662

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It was not executed in accordance with either 37 CFR 1.66 or 1.68.

Specifically, it is noted that the typed name for Mr. Philippe Jean Billaud is mistakenly typed "BILLAUD PHILIPPE JEAN," and that of Mr. Claude Rene De Volder is mistakenly typed "DE VOLDER CLAUDE RENE." The mistake became apparent to the Examiner upon comparing these typed names on the 07 April 2006 declaration with those on the 371 documents. Further, it is noted that the order of names for each of the inventors does not agree between the typed name and the signed name. The USPTO has entered the inverted names as typed on the declaration in the official records.

- 2. The Specification is hereby objected to under 37 CFR 1.77(b) and (c) in that it lacks the necessary sectional headings as set forth in the rule. Correction is hereby required.
- 3. The drawings are objected to because: (1) Figure 2 is described in the Specification as an "exemplary receiver" (page 4, line 2), so it must be labelled "PRIOR ART"; and (2) the drawings fail to show the claimed apparatus of claims 15 in 16 per 37 CFR 1.83(a). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any

Art Unit: 3662

amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. No new matter may be entered.

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 9 is indefinite and unclear in that it is presented as a method claim, but it fails to set forth even one positive method step. The

Art Unit: 3662

essence of what is claimed as a "method for defruiting the transponder responses" (line 1) is found in the phrase, "the defruiting method comprising a test of the synchronism of the responses received in various recurrences" (lines 4-5), but this phrase in no way recites a positive method step. This phrase alludes to a "test of the synchronism," but fails to state clearly and definitely what that "test" is. Further, dependent claims 10-14 are unclear in that likewise not one of these dependent claims adds a positive method step to the method of claim 9, from which they depend.

On line 1 of independent claim 9, "the transponder responses" lacks antecedent basis in that there is no earlier mention of "transponder responses."

The expressions on lines 7 and 8 of independent claim 9 are indefinite and unclear in that it is not clear in context how these expressions are part of the claimed method.

Dependent claim 15 is indefinite and unclear in that it is not clear in context how the recited "correlation device" performs the method of independent claim 9, especially with respect to the expressions on lines 7 and 8 of claim 9.

Dependent claims 16 is unclear at least in that it depends from unclear dependent claim 15.

Dependent claim 15 is indefinite and unclear in that it is not clear what is claimed by claim 15 in that it is an apparatus claim dependent from a method claim (i.e., claim 9).

**Application/Control Number:** 

10/575,084 Art Unit: 3662

Dependent claim 16 is indefinite and unclear in that it is not clear what is claimed by claim 16 in that it is an apparatus claim ultimately dependent from a method claim (i.e., claim 9).

Overall, claims 9-16 fail to set forth the metes and the bounds of what is to be protected so as to give the public fair notice. Please see MPEP 2173.

Dependent claims 10-16 are unclear in that they depend from unclear independent claim 9.

## 6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Independent claim 9 is set forth as a claim for a "method for defruiting the transponder responses received by a secondary radar" (lines 1-2), but it only lists two mathematical expressions (lines 7 and 8) without claiming the use of these expressions to actually perform the action of "defruiting." In that independent claim 9 merely is a mathematical algorithm, which may or may not be performed by a computer, it fails to fall into one of the statutory categories of invention under 35 USC 101. Please see MPEP 2106.02 for claims directed to mathematical algorithms. Dependent claims 10-14 are likewise non-statutory in that they fail to add anything to the claimed method that

Art Unit: 3662

would cause the method to fall into one of the statutory categories of invention under 35 USC 101.

7. The Specification is hereby objected to under 37 CFR 1.71 in that it fails to teach one of ordinary skill-in-the-art how to make and/or to use the invention.

The Specification fails to disclose adequately to one of ordinary skill-inthe-art how to implement the method as set forth in claims 9-14 nor how to make
and to use the device as claim in claims 15 and 16. With respect to the claimed
apparatus of claim 16, it is noted that there is no real disclosure of a "secondary
radar" in the specification. With respect to the claimed apparatus of claim 15, it is
noted that there is no real disclosure as to how to make the claimed "defruiter" to
implement the method of claim 9.

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 9-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the

Art Unit: 3662

invention. Please see the remarks with the objection to the Specification in section 7 above.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The examiner-cited prior art is of general interest for showing the state of the related prior art. Of the patents cited by the Examiner, Ballantyne et al ('402) is closest to the claimed invention, insofar as it may be understood. Please especially note the mention in the Abstract of Ballantyne et al ('402) of the use of the timing of framing pulses.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernarr E. Gregory whose telephone number is (571) 272-6972. The examiner can normally be reached on weekdays from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza, can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Application/Control Number:

10/575,084

Art Unit: 3662

Page 8

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Bernarr E. Gregory

Primary Examiner

Art Unit 3662